

ADDRESS DECODING METHOD AND RELATED APPARATUS BY COMPARING MUTUALLY EXCLUSIVE BIT-PATTERNS OF ADDRESSES

Abstract

A memory address decoding method for determining if a given address is located in one of a plurality of sections. Each section has a plurality of memory units and each memory unit has a unique corresponding address, the corresponding address using the binary system. The method includes making the corresponding address in a section with greater size smaller than the corresponding address in a section with smaller size, building a single bit-pattern for each section from all corresponding addresses, and comparing if at least one comparative bit of the given address matches those in any of the bit-patterns so as to determine the given address is located in one of the sections based on the comparison.